

**UNITED STATES  
AIR FORCE**

# **OCCUPATIONAL SURVEY REPORT**

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**AEROSPACE MEDICINE**

**AFSCs 48GX/4F0X1**

**AFPT 90-901-961**

**NOVEMBER 1994**

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**OCCUPATIONAL ANALYSIS PROGRAM  
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON  
AIR EDUCATION and TRAINING COMMAND  
RANDOLPH AFB, TEXAS 78150-4449**

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# **DISTRIBUTION FOR AFSCs 48GX/4F0X1 OSR**

	<u>OSR</u>	<u>ANL EXT</u>	<u>TNG EXT</u>	<u>JOB INV</u>
AFOMS/OMDQ	1			
AFOMS/OMYXL	10		5	10
AL/AOC, 2507 KENNEDY CR, BROOKS AFB TX 78235-5123	2	2	2	2
AL/HRMM	2			
AL/HRTE	1		1	
ARMY OCCUPATIONAL SURVEY BRANCH	1			
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HQ AETC/DPAEE	3		3	
HQ AFC4A/RMPP	3		3	
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HQ AFMPC/DPMRAD2	1			
HQ AFMPC/DPMYCO3	2			
HQ AMC/DPAET	1			
HQ HSC/DP	1		1	
HQ PACAF/DPAET	3		3	
HQ USAF/SGP (AFSC 48GX FUNCTIONAL MGR))	1		1	
HQ USAF/SGPA (AFSC 4F0X1 FUNCTIONAL MGR))	1		1	
HQ USAFE/DPATTJ	3		3	
NODAC	1			
STANDARDS BRANCH	1			
USAFSAM/AF, ATTENTION: SMSGT DUNWIDIE, 2513 KENNEDY CR, BROOKS AFB TX 78235-5123	2	2	2	2
USAFSAM/DA	2	2	2	2
92 MED CLINIC, ATTENTION: SMSGT PERSAL, 713 HOSPITAL LOOP, SUITE 108, FAIRCHILD AFB WA 99011-8701	1		1	

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## PREFACE

This report presents the results of a detailed Air Force Occupational Survey of the Aerospace Medicine Physician utilization field (935X) and the Aerospace Medicine career field (901X0). Authority for conducting occupational surveys is contained in AFI 36-2623. Computer products that support this report are available for use by operations and training officials.

The survey instrument was developed by Captain Harold Huguley III, with computer programming support by Ms. Becky Hernandez. Ms. Linda McDonald provided administrative support. First Lieutenant Todd W. Kustra, Occupational Analyst, analyzed the data and wrote the final report. This report was reviewed and approved by Mr. Gerald R. Clow, Chief, Management Applications Section, Occupational Analysis Flight.

Approved additional copies are available upon request to the AF Occupational Measurement Squadron, Attention: Chief, Occupational Analysis Flight (OMY), 1550 5th Street East, Randolph AFB TX 78150-4449.

RICHARD C. OURAND, JR., Lt Col, USAF  
Commander  
Air Force Occupational Measurement Sq

JOSEPH S. TARTELL  
Chief, Occupational Analysis Flight  
Air Force Occupational Measurement Sq

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## SUMMARY OF RESULTS

1. As of June 1992, there are 428 Air Force officers eligible to respond in the 935X utilization field, and 982 eligible enlisted respondents in the 901X0 career field. Survey percentages (MAJCOM, paygrade, TAFMS) are closely aligned with the percent assigned indicating a representative sample.
2. There were three independent jobs identified in the survey, as well as two job clusters. The first job cluster, Aerospace Physicians, was made up of three jobs, Operational Flight Surgeons, Physical Examinations Physicians, and SGP Physicians. The second cluster, Managerial Personnel, was made up of three jobs, MAJCOM Staff Personnel, Superintendents, and Hospital Commanders. The three independent jobs, Physical Examinations Personnel, Patient Care Personnel, and Training Staff, were identified for the 901X0 career field. The two largest jobs identified for the enlisted career field, Patient Care and Physical Examinations, comprise 84 percent of the enlisted sample population. The remainder of the enlisted population was distributed among the Managerial Personnel cluster and the Training Staff assigned to the USAF School of Aerospace Medicine (USAFSAM). The officer utilization field, 935X, is comprised of an Aerospace Physicians cluster and part of the Managerial Personnel cluster. The Aerospace Physicians cluster encompassed 79 percent of the officer sample population, and the Managerial Personnel cluster encompassed 14 percent of the officer sample population.
3. Career progression was evident throughout all analysis groups. As experience increased, enlisted respondents generally reported spending greater percentages of time performing supervisory and managerial functions. Officer grades showed career progression in much the same way. Captains and majors generally reported performing Aerospace Medicine jobs; lieutenant colonels generally reported performing SGP duties, while colonels generally performed SGP (Flight Medicine) functions and Hospital Commander duties.
4. Comparison with Previous OSR: The previous Occupational Survey Report (OSR), Medical Service Career Ladders, AFSC 902X0/A/B/C, was printed in June 1986. As reported in the historical section of this text, AFSC 901X0 was the C-shred of the 902X0 career field. As such, C-shred personnel performed duties in three major areas, Flight Medicine, Career Ladder Management, and Training. All three of these jobs were not identified in the current study, because more specific areas of responsibility were identified in the current study.
5. Duty AFSC Analysis: The specialty description analysis indicated personnel were basically performing duties and tasks specified in AFMAN 36-2105 and AFMAN 36-2108. All grade spread requirements were being met. The description written in AFMAN 36-2108 concerning DAFSCs 90130/90150, 90170, and 90190/90100 was accurate, as well as the description of DAFSC 9351 and 9356 in AFMAN 36-2105.

6. Military Rank Analysis: In performing an analysis of the military rank, lower ranking officers were generally spending more time performing Operational Flight Surgeon duties, while higher ranking officers tend to have more supervisory duties. Likewise, lower ranking enlisted personnel spend more time performing Physical Examinations and Patient Care functions, while senior NCOs performed more supervisory types of duties.
7. First Assignment Personnel: Based on time in utilization field (TIUF) and time in career field (TICF), the survey included 337 respondents who were first-assignment personnel. Out of these 337 respondents, 71 were officers and 266 were enlisted. First-assignment 9351 officers mostly perform Operational Flight Surgeon duties. First-term 901X0 personnel mostly perform Physical Examinations functions and Patient Care functions.
8. Training Analysis: Overall, analysis of the OSR data with the Specialty Training Standard (STS) 901X0 and Course Training Standard (CTS) B30BY9351 revealed that the data provide adequate support for these documents. However, there are some areas that might be improved upon. Likewise, Plan of Instruction (POI) B3ABY90130 is being supported by the OSR data, but may need some minor adjustments.
9. Job Satisfaction: Overall, officers and enlisted personnel involved with Aerospace Medicine were fairly satisfied. As for career plans and intentions, most of the personnel plan to stay in the Air Force and retire. As a whole, all personnel, except Hospital Commanders, expressed interest in their job and are satisfied with their work accomplishment. They also feel that their talents and training are being utilized.
10. Implications: Analysis of AFMAN 36-2105 and 36-2108 indicates that the current duty descriptions and grade spreads are accurate. The OSR analysis indicates that most members feel that communications between different aerospace medicine departments and facilities might be improved. The Physicians cluster reported that 67 percent did not feel that the initial training course provided adequate training for administrative tasks. The CTS, STS, and POIs for respective aerospace medicine personnel are mostly supported by the OSR data. However, slight changes are warranted.



**OCCUPATIONAL SURVEY REPORT (OSR)  
FLIGHT SURGEONS AND AEROMEDICAL PERSONNEL  
AFSCs 935X AND 901X0**

**INTRODUCTION**

This report summarizes the occupational survey results of the Aerospace Medicine Physician utilization field (935X) and the Aerospace Medicine career field (901X0). USAFSAM/ED requested the survey to analyze the effectiveness of the current training program for Aerospace Medicine utilization field (AFSC 935X). The analysis incorporates an assessment of the tasks trained in the Aerospace Medicine Primary course and the Aeromedical Specialist course; there is an evaluation of tasks listed in the Course Training Standard (CTS), Specialty Training Standard (STS), and the Career Development Course (CDC); and a comparison of tasks required versus actual tasks performed by incumbents. In addition, several other issues will be analyzed, such as the emergency skills needed for Squadron Medical Element personnel versus those needed for non-Squadron Medical Element personnel, the amount of time spent on patient care versus time spent performing administrative duties, and the scope of job satisfaction for both officers and enlisted personnel.

Historical Background. The Aerospace Medicine utilization field grew from the aircrew combat loss data in the British Royal Air Force of World War I. These data showed that for every 100 pilots lost in combat, 2 were due to enemy action, 8 due to mechanical failure, and 90 due to human error. When the United States entered the war in 1917, General Pershing directed the first chief surgeon, Major Theodore Lyster, to go to Europe in February 1918 and determine how to improve aircrew survival. This resulted in the formation of the concept of physicians who would become intimately familiar with aviators, the environment in which they worked, and the performance demands they faced. Upon his return, Dr. Lyster organized an informal 4-week graduate course in aviation medicine to prepare physicians to learn to prevent accidents and ultimately lead to improved human performance and combat effectiveness in the flying environment. This course was initially taught at the Air Service Medical Research Laboratory at Hazelhurst Field, Mineola, New York. This was the forerunner of the United States Air Force School of Aerospace Medicine. The subject of this occupational survey addresses only one of these disciplines, that of the flight surgeon, a member of the aerospace medicine discipline, and the aeromedical specialists who work with the flight surgeon.

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The AFSC 935X utilization field starts as a physician completes the entry-level Aerospace Medicine Primary Course (B30BY9351). The flight surgeon, upon being awarded the aeronautical rating, is assigned typically as a base-level flight surgeon. Further experience and formal training lead to duties such as chief of aerospace medicine. Some flight surgeons elect to pursue a 3-year residency in Aerospace Medicine. This specialty training involves clinical, academic, and practicum experience leading to a Master's Degree in Public Health and eligibility for the Board of Preventive Medicine. This training prepares these physicians for jobs in demanding aerospace medical departments, MAJCOMs, and in research and education roles, as well as in Air Staff positions.

The AFSC 901X0 career ladder starts as an airman completes the entry-level Aeromedical Specialist Course (B3ABY90130). The course provides students with an introduction to medicine, anatomy, physiology, and pathophysiology as well as training in emergency medicine, aerospace medicine, physical examinations, and the USAF Hearing Conservation Program. AFSC 901X0 is a relatively new career ladder, which until recently, was the C-shred of the 902X0 career ladder.

## **CURRENT SPECIALTY DESCRIPTIONS**

**Aerospace Medicine Physician (9351 and 9356):** Administers aerospace program; conducts medical examinations, and provides medical care for flyers, missile crews, and others with special standards of medical qualifications. Evaluates living and working environment to detect and control health hazards and prevent diseases and injury within the Air Force. Provides primary medical care to flying personnel and their families, provides medical support to the operational mission, serves as advisor to the professional staff, performs as Aerospace Medicine Specialist, Preventive Medicine Specialist, Occupational Medicine Specialist, and Family Practice Specialist.

**Aeromedical Specialist (90110, 90130, and 90150):** Assists flight surgeon with medical care and treatment of flying and special operational duty personnel. Implements the Aerospace Medicine program. Conducts medical examination of personnel, assists medical officers with flying and nonflying physical examinations, assists with medical crash coverage, assists the flight surgeon with routine nonclinical aeromedical activities, and performs aeromedical administration.

**Aeromedical Technician (90170):** Participates in supervising, providing, and evaluating treatment and care for flying and special operational duty personnel. Assists in medical examinations of personnel. Performs aeromedical functions, assists with crash coverage, performs phases of physical examinations not requiring judgment of medical officer, instructs in aeromedical subjects, collects and maintains statistical data, and prepares reports in support of the Aerospace Medicine program.

**Aeromedical Superintendent (90190 and 90100):** Superintends aeromedical activities. Participates in managing aeromedical services by planning, providing, and evaluating requirements. Manages training programs, establishes and directs inservice training for aeromedical personnel, and inspects aeromedical activities.

## **SURVEY METHODOLOGY**

**Inventory Development.** The data collection instrument for this occupational survey was "USAF Job Inventory (JI) 935X and 901X0, AFPT 90-901-961, dated 29 June 92." The inventory consisted of two main sections:

- 1) Respondents' biographical and current job information section
- 2) A detailed list of tasks performed at all organizational levels

The task list for the 901X0 career field was prepared after reviewing the previous JI, the aeromedical publications, and all pertinent directives; however, the officer task list was the first ever accomplished, so no previous JI existed. The list was further developed by selected subject-matter experts (SMEs) at the locations specified in Table 1.

**TABLE 1**

<b>Location</b>	<b>Organization Visited</b>
Offutt AFB	HQ SAC/SGP EBSH/SGP
Ellsworth AFB	28 Med Grp/SGP
Travis AFB	David Grant Med Cen/SGP
Nellis AFB	554 Med Grp/SGP
Edwards AFB	AFSC Hosp/SGP
Fairchild AFB	92 Strat Hosp/SGP
Langley AFB	HQ TAC 1 Med Grp
Pope AFB	317 Med Grp
Eglin AFB	AFSC Rgn Hosp/SGP
Hurlburt AFB	HQ AFSOC/SGP

The resulting JI contained a comprehensive listing of 795 tasks grouped under 13 duties. **Table 2** provides a list of the duty titles used in the JI.

**TABLE 2**

**Selected Aerospace Medicine  
Duty Titles**

A.	Performing Organizing and Planning Functions
B.	Performing Directing and Implementing Functions
C.	Performing Inspection and Evaluating Functions
D.	Performing Training Functions
E.	Performing Administrative Functions
F.	Performing Patient Care Procedures
G.	Performing Physical Examinations Functions
H.	Performing Medical Crash and Rescue Functions
I.	Performing Squadron Medical Element and General Activity Functions
J.	Performing Aeromedical Evacuation Functions
K.	Performing Emergency Medicine Functions
L.	Performing Physician Diagnosis and Medical Management Functions
M.	Performing Physician Procedures

Survey Sample. During March through June 1993, 1,410 Aerospace Medicine JIs were administered in an effort to capture all eligible aerospace medicine personnel. In total, 899 JIs were usable on return and analyzed; this represents 64 percent of the 1993 eligible population. **Table 3** shows sample representation by MAJCOMs. Sample is representative of the original population.

TABLE 3

**DISTRIBUTION OF SURVEY SAMPLE BY MAJCOM**  
(Percent Members Performing)

MAJCOM	901X0		935X	
	PERCENT ELIGIBLE (N=982)	PERCENT OF SAMPLE (N=669)	PERCENT ELIGIBLE (N=428)	PERCENT OF SAMPLE (N=230)
USAF	1	2	1	1
AETC	8	10	8	12
USAFE	10	9	10	9
PACAF	11	13	4	5
ACC	36	34	34	32
AMC	15	15	16	13
AFMC	13	9	15	17
SPACECOM	2	3	2	2
Other	4	5	10	9

Survey Administration

USAF JI Booklets. All individuals who filled out an inventory completed an identification and biographical section. Next, they went through the booklet and checked each task performed in their current job. Finally, they went back and rated each task they checked on a 9-point scale reflecting relative time spent on each task compared to all other tasks. Ratings ranged from "1," which indicated very small amount of time spent, to "9," which indicated a very large amount of time spent. The relative percent time spent on tasks for each inventory was captured by first totaling all rating values on the inventory. The rating for each task was then divided by this total and the result multiplied by 100. The percent time spent ratings from all inventories were combined and used with percent members performing to describe the various groups in the career utilization field.

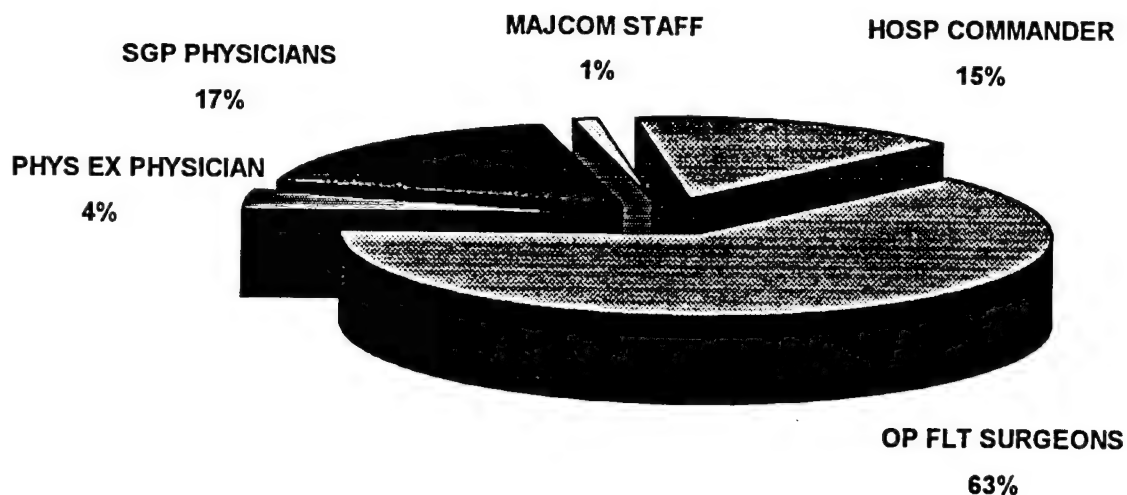
Training Emphasis (TE) Booklets. TE booklets were completed by 49 experienced 935X officers in the grade of major and 49 experienced 901X0 NCOs in the grades of technical sergeant and master sergeant. Individuals completing the TE booklets were also asked to rate tasks on a 10-point scale (from "0," no training is required, to "9," extremely high amount of training needed). The TE rating is a relative comparison of which tasks require structured training of new

aeromedical personnel (first 48 months in the career field). "Structured" training is defined as training provided at training schools, field training detachments, mobile training teams, formal OJT, or any other organized training method. For this survey, the officer responses indicated no agreement among raters and will not be discussed in this report.

Task Difficulty (TD) Booklets. To complete the TD booklet, a total of 62 technical sergeants and master sergeants rated each task in the inventory with which they were familiar on a 9-point scale, extremely low relative difficulty (a rating of 1) to an extremely high relative difficulty (a rating of 9). TD refers to the length of time required for the average job incumbent to learn to perform that task satisfactorily. The data had an interrater reliability (as assessed through components of variance of standardized group means) of .97. This figure indicates high agreement among raters. The TD ratings were adjusted to give a rating of 5.00 to a task of average difficulty, with a standard deviation of 1.00. The data are then used to rank order the tasks in the JI in descending values of rated task difficulty. When used in conjunction with other information, such as percent members performing and TE, TD ratings can provide insight into training requirements. Such insight may help validate lengthening or shortening portions of instruction to fill the actual required needs of the employers of tech school graduates.

## SPECIALTY JOBS

**IDENTIFIED 935X JOBS AS A PERCENT OF SAMPLE  
(FIGURE 1)**



Job Clustering Process. Once the JIs and the task factor booklets were received from the field, a very powerful computer program written to analyze occupational input data called the Comprehensive Occupational Data Analysis Programs (CODAP) created a job description for each respondent, as well as composite job descriptions for members of various demographic groups.

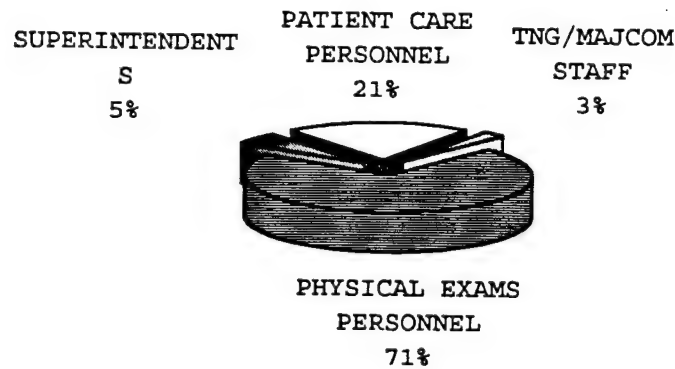
For the purpose of organizing individual jobs into similar units of work, CODAP used an automated job clustering process. The basic identified group in this hierarchical process is referred to as a "job." If this job has distinguishing characteristics that are unrelated to other jobs, it is referred to as an "independent job." When there is a substantial degree of similarity between jobs, they are grouped together and identified as a "cluster." The resulting data may be used to evaluate the accuracy of career documents (e.g., AFMAN 36-2105 and AFMAN 36-2108) and to gain a better understanding of current personnel utilization and training applications.

Overview of Specialty Jobs. There are nine aerospace medicine jobs that were identified; three of these jobs are found under the Aerospace Physicians job cluster, and another three of these jobs are found under the Managerial Personnel job cluster, and the final three were independent jobs. The nine identified jobs represent 86 percent of the aerospace medicine survey. The majority of enlisted respondents spend their duty time performing tasks associated with Administrative Functions (31 percent), performing Physical Examinations Functions (23 percent), performing Patient Care Functions (15 percent), performing Medical Crash and Air Rescue Coverage (8 percent), and performing Organizing and Planning Functions (7 percent). Officers spend most of their duty time performing tasks associated with performing Administrative Functions (15 percent), performing Organizing and Planning Functions (13 percent), performing Directing and Implementing Functions (12 percent), performing Physical Examinations Functions (10 percent), and performing Patient Care Functions (10 percent).

Figures 1 and 2 show the personnel percentage distribution among the identified clusters and independent jobs. The titles chosen may not directly equate to primary duty areas or reflect any present offered aerospace medicine job titles. Each title does, however, describe what the incumbents actually do in their assigned positions.

FIGURE 2

## 901X0 PERCENT OF SAMPLE



\*Training Staff and MAJCOM Staff were combined on this figure due to low percentages

**Job Descriptions.** The following paragraphs offer a brief description of the nine specialty jobs: three independent jobs are listed, plus six other jobs that are grouped within two job clusters. First, a list of the duties where the incumbents spend the majority of their duty time is presented. Then a list of typical tasks in these duty headings and pertinent background information is discussed to differentiate between all the other jobs. Appendix A presents a detailed list of independent jobs and jobs identified in each cluster; Appendix B presents relative duty time spent by specialty groups; Appendix C compares the officer and enlisted grades by independent and identified jobs and DAFSC. Appendix D outlines the information contained in the job satisfaction indicators. Appendix E presents background information for each cluster and independent job.

It is important to note that the personnel performing Squadron Medical Element duties were not identified and were included within the Patient Care group. This is due to the overlapping tasks found in the two groups. The tasks listed under the heading Squadron Medical Element (SME) and General Activity Functions were very specific to Squadron Medical Element duties and did not include those tasks that were shared among groups. For a more detailed list of tasks included under each duty heading, consult the II.

**I. PHYSICAL EXAMINATIONS PERSONNEL (N=437).** This is a large independent job consisting of members whose efforts are highly concentrated in conducting physical examinations. Their duty time is spent performing tasks in the following duties: performing Administrative Functions (31 percent), performing Physical Examinations Functions (30 percent), performing Patient Care Procedures (14 percent), and performing Medical Crash and Air Rescue Coverage (8 percent). Between 85 to 100 percent of the members perform the following differentiating tasks:



- Obtain and record blood pressures
- Obtain and record body weight
- Obtain and record pulse
- Schedule personnel for physical examinations
- Perform Audiograms
- Prepare SF Forms 88 (Report of Medical Examination)
- Prepare SF Forms 93 (Report of Medical History)
- Determine and record items of medical history
- Perform eye examinations by using vision testing apparatus-near distant (VTA-ND) testers
- Assemble physical examinations forms
- Schedule patient appointments
- Perform Visual Testing Set-Color Vision (VTS-CV) Color Examinations
- Perform Depth Perception Apparatus-Verhoff (DPA-V)

Incumbents predominantly work in ACC (34 percent), AMC (16 percent), and PACAF (14 percent), with the majority of these members located at group level (46 percent). Twenty-two percent of these incumbents are dissatisfied with the sense of accomplishment from their work, and 14 percent felt the communication flow between different aerospace medicine areas is poor to very poor. These members performed the most average number of tasks (157). Twenty-two percent of personnel in this job spend more than 50 percent of their time seeing patients, 26 percent spend 31-50 percent of their time seeing patients, and 38 percent spend 11-30 percent of their time seeing patients. Twelve percent have not completed Emergency Medical Technician (EMT) training. The grade spread ranged from airman to senior master sergeant, with a majority (41 percent) at senior airman/sergeant.

**II. PATIENT CARE PERSONNEL (N=128).** This independent job represents members whose efforts are highly concentrated in performing patient care procedures. Their time is spent performing tasks in the following duties: performing Administrative Functions (35 percent), performing Patient Care Procedures (31 percent), and performing Medical Crash and Air Rescue Coverage. Between 85 to 100 percent of the NCOs perform the following differentiating tasks:

- Obtain and record blood pressures
- Obtain and record temperatures
- Obtain and record pulse
- Screen patients at sick call
- Schedule patient appointments

Prepare AF Forms 1042 (Medical Recommendations for  
Flying or Special Operational Duty)  
Inprocess and outprocess flying personnel  
Administer ear irrigations

Thirty-eight percent of the incumbents work in ACC, 15 percent work in AMC, 12 percent work in PACAF, 11 percent work in AETC, 6 percent work in AFMC, and 6 percent work in USAFE. Most Patient Care Personnel (41 percent) work at the group level, while 36 percent work at the squadron level. Sixty percent of these members do not have any supervisory duties and perform the second highest number of average total tasks (108). Of all the jobs that were identified, Patient Care Personnel tied for the lowest percentage (66 percent) of members who found their job interesting. In addition, 59 percent of these incumbents felt they would stay in the AFSC until retirement. Eleven percent of the Patient Care Personnel have not completed EMT training. The grade spread extended from airman to technical sergeant.

III. **TRAINING STAFF (N=6)**. This independent job represents less than 1 percent of the total survey. Members spend their duty time performing tasks in the following duties: performing Training Functions (79 percent), performing Organizing and Planning Functions (6 percent), performing Directing and Implementing Functions (5 percent), and performing Administrative Functions (4 percent). Between 80 and 100 percent of these members perform the following differentiating tasks:

Evaluate student or trainee progress  
Administer oral, written, or performance tests  
Conduct CPR training  
Conduct Emergency Medical Technician (EMT) training  
Evaluate training methods, techniques, or programs  
Prepare lesson plans  
Conduct Basic Life Support (BLS)

All of the personnel are enlisted and perform similar tasks, duties, and jobs. The members of this group work at USAFSAM. This independent job is noteworthy in that it has the highest job satisfaction rating (100 percent) of any independent job or job cluster, despite 17 percent working 60-69 hours a week and 33 percent working 50-59 hours a week. All members plan to stay in their current AFSC until retirement. The grade spread ranged from staff sergeant through technical sergeant.

**Aerospace Physicians Cluster (N=181).** This job cluster represents 20 percent of the entire survey. The members in this group are all officers and include Operational Flight Surgeons, Physical Examinations Physicians, and SGP (Flight Medicine) Physicians. Incumbents spend their duty time performing Administrative Functions (16 percent), Emergency Medicine Functions (11 percent), Patient Care Procedures (11 percent), and Organizing and Planning Functions (10 percent). The following tasks are performed by 85-94 percent of the physicians:

- Prepare aeromedical summaries in support of medical waiver packages
- Diagnose and treat office otorhinolaryngologic problems
- Perform initial interpretation of X-rays pending review of radiologist
- Interpret electrocardiographic (ECG) tracings
- Diagnose and treat office orthopedic problems
- Participate in flight surgeon meetings
- Participate in professional staff meetings
- Diagnose and treat office pediatric problems
- Diagnose and treat office adult internal medicine problems
- Prepare briefings
- Diagnose and treat office urologic problems
- Perform fluorescein eye examinations

In this group, 90 percent reported that their job is interesting, and 82 percent reported that they are satisfied with the sense of accomplishment from their job. This contrasts with the average enlisted person in a medical career field in that 82 percent rated their job as interesting, and 75 percent are satisfied with the sense of accomplishment their work brings. It is interesting to note that more time is spent on administrative work (16 percent), rather than performing patient care (11 percent) or performing physical examinations (10 percent). One hundred percent of all members in this group performed some type of administrative work. The average number of tasks performed by this group was 216, which indicates that this group has a large area of responsibility usually reserved for experienced personnel. The Aerospace Physicians cluster also reported that 67 percent did not feel that the initial training course (AMP Course) provided adequate training for administrative tasks. The grade spread is from captain to colonel.

**IV. OPERATIONAL FLIGHT SURGEONS (N=102).** This job represents members whose efforts are highly concentrated in performing flight medicine. Members spent their duty time performing Administrative Functions (17 percent), performing Emergency Medicine Functions (13 percent), performing Patient Care Procedures (12 percent), and performing Physical Examinations (11 percent). Between 95-100 percent of the members performed the following tasks:

- Conduct sick call
- Identify problems and needs of patients
- Provide initial emergency care for minor respiratory illness
- Prepare aeromedical summaries in support of medical waiver packages
- Diagnose and treat office orthopedic problems
- Provide initial emergency care for musculoskeletal trauma
- Diagnose and treat office pediatric problems
- Provide initial emergency care for minor gastrointestinal illness
- Interpret electrocardiographic (ECG) tracings
- Diagnose and treat office adult internal medicine problems
- Provide initial emergency care for minor pediatric illness
- Provide initial emergency care for minor dermatologic illness
- Participate in flight surgeon meetings
- Provide initial emergency care for urinary tract infections
- Provide initial emergency care for gynecologic problems

Most of the members of this group are in ACC (41 percent), while 18 percent are in AMC, 10 percent are in AETC, 9 percent are in AFMC and USAFE, and 6 percent are in PACAF. Most Operational Flight Surgeons (51 percent) spend 21-40 percent of their time performing administrative tasks. The grade spread is between captain and colonel.

V. **PHYSICAL EXAMINATIONS PHYSICIANS (N=6)**. This small job indicates that there are officers who spend most of their time performing physical examinations, physician diagnosis, and medical management duties. These doctors perform a very small percentage of the emergency medicine (3 percent) and physician procedures (6 percent) functions. One hundred percent of the members performed the following tasks:

- Perform initial interpretation of X-rays pending review of radiologist
- Interpret electrocardiographic (ECG) tracings
- Diagnose and treat office adult internal medicine problems
- Diagnose and treat office otorhinolaryngologic problems
- Diagnose and treat office orthopedic problems
- Diagnose and treat office ophthalmic problems not including iritis or glaucoma
- Diagnose and treat office urologic problems
- Diagnose and treat office neurologic problems
- Diagnose and treat office gynecologic problems

At first glance, these functions look similar to the tasks of other doctors in the Physician cluster; however, a comparison of duties indicates that more time is spent on physical examination functions (20 percent) and patient care procedures (19 percent) than in any other group. Thirty-three percent are in USAFE, 33 percent are in AMC, 17 percent are in AETC, and 17 percent are in AFIC. Sixty-seven percent indicated that the initial training course provided adequate training for administrative tasks. The grade spread is from captain to colonel.

**VI. SGP PHYSICIANS (N=28).** The members of this group are department-level managers that fall under the Hospital Commander. This independent job represents 7 percent of the officers surveyed. Members spend their time performing the following duties: Organizing and Planning Functions (18 percent), Directing and Implementing Functions (18 percent), Administrative Functions (14 percent), and Inspecting and Evaluating Functions (12 percent). Differentiating tasks performed by these members include:

- Participate in professional staff meetings
- Conduct quality improvement activities, such as TQM, QA, QI, or QAF
- Evaluate quality of patient care
- Prepare for major inspection
- Coordinate with specialty clinics or other sections on medical activities
- Develop local medical facility operating instructions, standard operating procedures, or hospital regulations
- Indorse Enlisted Performance Reports (EPRs)
- Participate in flight surgeon meetings
- Coordinate with flight surgeons on medical activities

Most of the members of this group are colonels (43 percent), with 25 percent at lieutenant colonel, 21 percent at major, and 11 percent at captain. Twenty-nine percent are in AETC, 21 percent are in AFMC, 14 percent are in ACC, 11 percent are in AMC, 7 percent are in AFSPACECOM, 4 percent are in AU, and 4 percent are in PACAF.

**Managerial Personnel Cluster (N=87).** The members of this group are a mixture of enlisted and officer personnel. They provide manning in the leadership areas of aerospace medicine. The cluster includes MAJCOM Staff personnel, Hospital Commanders, and Superintendents. Fifty-six percent of the members are technical sergeant and above, and 33 percent are lieutenant colonel and above. Members spend their time performing Directing and Implementing functions (27 percent), Organizing and Planning Functions (26 percent), Administrative Duties (13 percent), Inspecting and Evaluating Functions (11 percent), and Training Functions (7 percent). Differentiating tasks performed by this group include:

- Direct administrative functions
- Interpret policies or directives for subordinates
- Conduct staff meetings
- Coordinate with MAJCOM personnel on medical issues
- Establish work priorities
- Conduct performance feedback sessions
- Coordinate with flight surgeons on medical activities
- Counsel subordinates on military or personal problems
- Determine personnel requirements
- Assign personnel to duty positions

Seventy-seven percent of this group report that they will retire in their current duty AFSC. As expected, this group spends the least amount of time seeing patients: 77 percent indicated that they spend 0-10 percent of their time seeing patients.

VII. **MAJCOM STAFF PERSONNEL (N=12)**. This job is a mix of enlisted and officer personnel. It indicates members who are located at the MAJCOM level or their respective field detachments. Members spend their time performing Physical Examinations Functions (26 percent), Organizing and Planning Functions (23 percent), Administrative Functions (18 percent), Inspecting and Evaluating Functions (14 percent), and Directing and Implementing Functions (13 percent). Differentiating tasks include:

- Certify physical examinations
- Determine physical qualifications or disqualifications of examinees
- Approve medical waiver packages
- Review medical waiver packages to determine aeromedical disposition
- Determine certification authority
- Coordinate with MAJCOM personnel on medical issues
- Coordinate with MAJCOM personnel on PES activities
- Prepare recommendations for changes to governing directives, standards, or local operating procedures

Sixty-seven percent of the members spend 81-100 percent of their time performing administrative tasks, such as processing forms, filing documents, and writing reports. Forty-two percent of the members in this group did not feel that adequate training was provided in the initial training course for administrative tasks. Surveyed members were located in the following MAJCOMs: USAFE, AETC, PACAF, AFIC, ACC, AMC, AFMC, AFSPACECOM, and ANG.

**VIII. HOSPITAL COMMANDERS (N=24).** This job represents 28 percent of the total Managerial Personnel cluster. Members spend their time performing Directing and Implementing Functions (41 percent), Organizing and Planning Functions (28 percent), Inspecting and Evaluating Functions (11 percent), and Administrative Functions (7 percent). Differentiating tasks include:

- Conduct staff meetings
- Interpret policies or directives for subordinates
- Evaluate individuals for promotion, demotion, or reclassification
- Indorse Officer Performance Reports (OPRs)
- Advise subordinates of medical ethics, professional standards, and regulatory policies

Members of this group have all acquired doctorate-level degrees, and all rate their job as interesting. Ninety-two percent are colonels, and 8 percent are lieutenant colonels. Twenty-nine percent of the hospital commanders surveyed are in ACC, 17 percent in AFMC, 13 percent in AETC, 8 percent in USAFE, 8 percent in PACAF, 4 percent in AU, 4 percent in HQ USAF, 4 percent in AMC, 4 percent in AF CBT OPS, and 4 percent are in JMMC.

**IX. SUPERINTENDENTS (N=32).** Members of this group serve in the enlisted leadership role as superintendents. Their time is spent performing Organizing and Planning Functions (26 percent), performing Directing and Implementing Functions (22 percent), performing Administrative Functions (15 percent), performing Training Functions (10 percent), and performing Inspecting and Evaluating Functions (10 percent). Differentiating tasks include:

- Establish work priorities
- Coordinate with flight surgeons on medical activities
- Prepare EPRs
- Interpret policies or directives for subordinates
- Counsel subordinates on military or personal problems
- Conduct performance feedback sessions
- Assign personnel to duty positions
- Schedule leaves or passes

Superintendents reported that 63 percent spend more than 61 percent of their time performing administrative tasks, such as processing forms, filing documents, and writing reports. Sixty-six percent feel that the initial training course did not provide adequate training for those types of administrative tasks. Of the surveyed members, 3 percent are assigned to HQ USAF, 6

percent are assigned to MAJCOM-level positions, 9 percent are assigned to wing-level positions, 44 percent are in group-level positions, and 38 percent are in squadron-level positions. Grade spread is from staff sergeant to senior master sergeant.

### **COMPARISON OF CURRENT JOB SPECIALTIES TO PREVIOUS OSRs**

The results of the specialty job analysis were compared to the previous OSR, Medical Service career ladders, dated June 1986. As mentioned in the historical section of the text, the 901X0 career field was designated as the C-shred of the 902X0 career ladder at the time of the previous OSR. The previous study did not adequately break down the C-shred into its component parts; therefore, a parallel study of specialty groups within the enlisted career field is not possible. In regard to the 935X utilization field, no prior study has been accomplished.

### **ANALYSIS OF DUTY AFSC**

An examination of DAFSC groups, along with the analysis of identified jobs, is an important part of each occupational analysis. The DAFSC analysis reveals similarities and differences among various levels, based on tasks they performed and the relative time spent on particular duties. The information is used to assess the accuracy and how well the utilization and career field documents (AFMAN 36-2105 and AFMAN 36-2108, respectively) reflect what career ladder personnel are actually doing in the field.

The distribution of 935X officer and 901X0 enlisted DAFSC groups across the duties is presented in Appendix B (relative time spent in each duty). The grade comparison by each DAFSC is provided in Appendix C. The distribution of DAFSC groups among the nine identified aerospace medicine jobs and two job clusters is also presented in Appendix A.

DAFSC 9351. As the officer entry-level DAFSC, the 29 personnel in this group devote the majority of their duty time performing Administrative Functions (17 percent), performing Patient Care Procedures (13 percent), performing Physical Examinations Functions (13 percent), and performing Organizing and Planning Functions (10 percent). The average number of tasks performed by 9351 officers is 142. The majority of the 9351 officers are in the Operational Flight Surgeon group (41 percent). The rank distribution includes captains through colonels with a high percentage of majors (28 percent) and colonels (7 percent). The duty description written in AFMAN 36-2105 is accurate indicating a grade spread from captain to colonel.



DAFSC 9356. This upgraded DAFSC group performs an average of 190 tasks. The 153 officers in this group spend their duty time performing Administrative Functions (14 percent), performing Organizing and Planning Functions (13 percent), performing Directing and Implementing Functions (12 percent), performing Physical Examinations Functions (10 percent), performing Patient Care Procedures (10 percent), and performing Emergency Medicine Functions (9 percent). The majority (84 percent) of the officers work in physician jobs, while 13 percent are Hospital Commanders. The grade spread includes captains (46 percent), majors (19 percent), lieutenant colonels (16 percent), and colonels (19 percent). This indicates the majority of the 9351s are upgrading into the 9356 DAFSC. The duty description written in AFMAN 36-2105 is accurate.

DAFSC 90130/90150. The analysis indicates there are 433 members in this group performing an average of 124 tasks. They spend 79 percent of their duty time performing Administrative Functions (34 percent), performing Physical Examinations Functions (26 percent), and performing Patient Care Procedures (19 percent). Nearly all of the members (79 percent) work in Physical Examinations, while 22 percent work as Patient Care personnel. The grade spread of DAFSCs 90130/90150 includes sergeants (52 percent), staff sergeants (15 percent), and technical sergeants (2 percent). The description written in AFMAN 36-2108 is accurate.

DAFSC 90170. This upgraded DAFSC group is the second largest 901X0 group. The 169 members perform an average of 165 tasks. They spend 84 percent of their time performing Administrative Functions (24 percent), performing Physical Examinations Functions (15 percent), performing Organizing and Planning Functions (13 percent), performing Directing and Implementing Functions (12 percent), performing Patient Care Procedures (10 percent), and performing Training Functions (9 percent). Fifty-four percent of these incumbents hold Physical Examinations positions, while 22 percent are involved with a job in the Managerial Personnel cluster. The grade spread included staff sergeants (47 percent), technical sergeants (34 percent), and master sergeants (18 percent). The description written in AFMAN 36-2108 is accurate.

DAFSC 90190/90100. This is a relatively small group with 21 members. They perform an average of 154 tasks. These members spend 85 percent of their duty time performing Organizing and Planning Functions (23 percent), performing Directing and Implementing Functions (19 percent), performing Administrative Functions (15 percent), performing Physical Examinations Functions (15 percent), and performing Inspecting and Evaluating Functions (12 percent). Eighty percent of the 90100s and 44 percent of the 90190s perform work on a MAJCOM-level staff. Of the remaining 90190s, 56 percent perform work in Physical Examinations related duties, and 25 percent perform work as Superintendents. The grade spread includes technical sergeants (5 percent), master sergeants (10 percent), senior master sergeants (52 percent), and chief master sergeants (33 percent). The description written in AFMAN 36-2108 is accurate. In addition, Appendix F shows representative tasks performed by 901X0 members.

## MILITARY RANK ANALYSIS

Analyzing the various characteristics associated with the rank distribution can provide officer utilization managers and enlisted career field managers with a better understanding of when and where to place Aerospace Medicine personnel based on their rank. In analyzing the relative time spent in duties across the rank distribution, **Appendix B3 and B4** indicate that typical duties of each rank correspond to duties that should be performed at the associated rank. Lower ranking officers generally spend more time performing Physical Examinations and Patient Care functions, while higher ranking officers tend to have more supervisory responsibilities. Likewise, lower ranking enlisted personnel spend more time performing Physical Examinations and Patient Care functions, while senior NCOs perform more supervisory types of duties. **Appendix C1 and C2** show the distribution of officer and enlisted grades across aerospace medicine jobs. **Appendix C3 and C4** display a positive correlation between the officer and enlisted rank distributions and the AF specialties; as rank increases, the managerial responsibilities increase.

Captains. This was the largest officer group by grade with 93 members, 40 percent of the total number of officers in the survey. These members comprise 66 percent of the 9351 utilization field and 46 percent of the 9356 personnel. They spend their duty time performing Administrative Functions (16 percent), performing Patient Care Procedures (13 percent), performing Physical Examinations Functions (12 percent), and performing Emergency Medicine Functions (11 percent). Most of the captains are Operational Flight Surgeons (56 percent), Physical Examinations Physicians (17 percent), and SGP Physicians (11 percent).

Majors. This was the second largest officer group by grade with 56 members, 24 percent of the total number of officers in the survey. These members comprised 28 percent of the 9351 utilization field and 19 percent of the 9356 utilization field. They spend their duty time performing Administrative Functions (16 percent), performing Patient Care Procedures (11 percent), performing Emergency Medicine Functions (11 percent), and performing Physical Examinations Functions (11 percent). The majors occupy 26 percent of the Operational Flight Surgeons group, 33 percent of the Physical Examinations group, and 21 percent of the SGP Physicians group.

Lieutenant Colonels. There were 39 officers who held the rank of lieutenant colonel, 17 percent of the total number of officers in the survey. All members are in AFSC 9356, which comprised 16 percent of the upgraded DAFSC. They spend their duty time performing Administrative Functions (15 percent), performing Organizing and Planning Functions (13 percent), performing Directing and Implementing Functions (13 percent), and performing Inspecting and Evaluating Functions (10 percent). They generally hold leadership positions associated with 25 percent of the SGP Physicians group, 33 percent of the Physical Examinations group, 17 percent of the Operational Flight Surgeons group, and 8 percent of the Hospital Commanders.

Colonels. There were 43 members who held the rank of colonel, 19 percent of the total number of officers in the survey. These members comprised 7 percent of the 9351 utilization field and 19 percent of the 9356 utilization field. They spend their duty time performing Directing and Implementing Functions (30 percent) and performing Organizing and Planning Functions (23 percent). They generally hold leadership positions associated with 43 percent of the SGP Physicians group and 92 percent of the Hospital Commanders.

Sergeants. This was the largest enlisted group by grade, with 244 members who held the rank of sergeant, 36 percent of the total number of enlisted personnel in the survey. The majority (63 percent) of these members are in AFSC 90150. They spend their duty time performing Administrative Functions (34 percent), performing Physical Examinations Functions (26 percent), performing Patient Care Procedures (18 percent), performing Medical Crash and Air Rescue Functions (8 percent), and performing Organizing and Planning Functions (4 percent). The jobs most common to sergeants are Physical Examinations and Patient Care.

Staff Sergeants. This was the second largest enlisted group, with 146 members, 22 percent of the total number of enlisted personnel in the survey. They are predominantly in AFSCs 90150 (16 percent) and 90170 (47 percent). They spend their duty time performing Administrative Functions (29 percent), performing Physical Examinations Functions (20 percent), and performing Patient Care Procedures (14 percent). Staff Sergeants make up 33 percent of the Training Personnel group, 26 percent of the Patient Care Personnel, and 21 percent of the Physical Examinations group.

Technical Sergeants. There were 69 members who held the rank of technical sergeant, 10 percent of the total number of enlisted personnel in the survey sample. These members comprise 34 percent of AFSC 90170. They spend their duty time performing Administrative Functions (22 percent), performing Organizing and Planning Functions (15 percent), performing Directing and Implementing Functions (14 percent), and performing Training Functions (13 percent). Technical sergeants are included in 38 percent of the Superintendents, 67 percent of the Training Personnel, 8 percent of the Physical Examinations group, and 7 percent of the Patient Care Personnel.

Master Sergeants. There were 35 members who held the rank of master sergeant, 5 percent of the total number of enlisted personnel in the survey. These members comprised 18 percent of the AFSC 90170 and 10 percent of AFSC 90190/90100. They spend their duty time performing Organizing and Planning Functions (21 percent), performing Administrative Functions (18 percent), performing Directing and Implementing Functions (17 percent), and performing Physical Examinations Functions (11 percent). The most common jobs for master sergeants include 34 percent of the Superintendents, 17 percent of MAJCOM Staff, 3 percent of the Physical Examinations group, and 1 percent of the Patient Care group.

Senior Master Sergeants. There were 12 members who held the rank of senior master sergeant, 2 percent of the total number of enlisted personnel in the survey. These members comprise 52 percent of AFSC 90190/00. They spend their duty time performing Organizing and Planning Functions (25 percent), performing Directing and Implementing Functions (23 percent), performing Administrative Functions (14 percent), performing Inspecting and Evaluating

Functions (13 percent), and performing Training Functions (12 percent). They generally hold leadership positions associated with 16 percent of the Superintendent group, 8 percent of the MAJCOM Staff group, and 1 percent of the Physical Examinations group.

Chief Master Sergeants. There were seven members who held the rank of chief master sergeant, 1 percent of the total number of enlisted personnel in the survey. These members comprise 33 percent of AFSC 90190/90100. They spend their duty time performing Organizing and Planning Functions (23 percent), performing Physical Examinations Functions (22 percent), performing Directing and Implementing Functions (17), and performing Inspecting and Evaluating Functions (14 percent). They generally hold leadership positions associated with 42 percent of the MAJCOM Staff personnel.

## TRAINING ANALYSIS

Occupational survey data are used to assist in the planning, developing, reviewing, and evaluating of various training programs and documents such as the CTS, STS, and POI. These data are relevant to personnel working in their first assignment. Factors that may be used in the analysis include percent of first-enlistment or first-assignment (1-48 months' TIUF or TICF) personnel performing tasks, along with TE and TD ratings (as explained in the Survey Administration section). These factors were used in reviewing the AFSC CTS 935X, STS 901X0, and POIs for courses G3OLR9351 003 and G3ALR90130 005, based on the matching of inventory tasks to the appropriate sections of the CTS, STS, and POIs by experienced technical school personnel from the USAFSAM. A complete computer listing displaying percent members performing, TE and TD ratings for each task, along with CTS, STS, and POI matchings, has been forwarded to the technical school for use in further review of training documents. A summary of that information is presented below.

First-Assignment Personnel. Based on TIUF (1-48 months), there were 71 first-assignment officers and based on TICF (1-48 months), there were 266 enlisted personnel in this survey. This represents 37 percent of all survey respondents. First-assignment 935X officers show a high concentration of duty time spent performing Administrative Functions (17 percent), performing Patient Care Procedures Functions (13 percent), and performing Physical Examinations Functions (11 percent). First-assignment 901X0 personnel perform mostly Administrative Functions (34 percent), Physical Examinations Functions (21 percent), and Patient Care Procedures (19 percent).

Training Emphasis. As explained in the Survey Administration section of this report, TE ratings are factors that can assist technical school personnel in deciding which tasks should be emphasized for entry-level training. In addition, they may provide support for adding or deleting training requirements. The TE ratings provided by 52 aerospace medicine enlisted SMEs yielded an average (mean) rating of 2.35, with a standard deviation of 2.04. According to ATCR 52-22, when a given task has an assigned TE rating greater than or equal to the sum of the mean value

plus one standard deviation, in this case 4.39 for enlisted personnel, it merits strong consideration for inclusion in some form of structured training. One hundred seventy-one of the one hundred seventy-five tasks met these criteria for the enlisted personnel. However, the officers rating the tasks could not reach an agreement and were not conclusive.

Task Difficulty. The relative difficulty of each task (enlisted personnel only) in the inventory was assessed through ratings of 87 experienced 901X0 NCOs. These ratings were processed to produce an ordered listing of all tasks in terms of their relative difficulty. Ratings were standardized to have an average of 5.0, with a standardized deviation equal to 1. As previously mentioned in the Survey Administration section of this report, TD data provide information on first-term training needs, as perceived by experienced technicians in the field. This information, along with the percent members performing data, can then aid training managers in determining if revisions to the STS or POI are required. Before a decision can be made based on TD information, one should also evaluate the percent members performing each task and the TE data. Because the TD ratings are the composite opinion of experienced career ladder personnel on how difficult the tasks are to learn, these data can guide training developers in deciding where to place emphasis in entry-level training. Tasks receiving high TD ratings, as well as moderate to high percent members performing, may warrant formal, resident training. Those tasks assigned high TD ratings, but low percentages of personnel performing, may be more appropriately planned for OJT programs. Low TD ratings may indicate tasks best left out of formalized training for entry-level personnel; however, such a decision must also consider the percentages of personnel performing the specific tasks, task criticality, command concerns, or safety programs.

STS and CTS. During the course of this analysis, technical school personnel from USAFSAM matched inventory tasks to the current STS and CTS. Utilizing the results of the matched data, a review of STS 901X0 (dated May 90) and CTS B30BY9351 (dated Jun 83), was conducted. Overall, many areas of the STS and CTS are well supported by survey data. There are, however, a few areas on these documents that do not appear to be supported due to less than 20 percent members of the criterion groups (first-term, 3/5- and 7-skill levels), (first-term, 9351) performing matched tasks, and low TE and TD data. In some STS areas, performance codes may need some minor adjusting.

The introductory STS main heading areas 1-9 were not addressed as task areas by the survey. This means that of the 708 tasks performed by enlisted personnel, none should be assigned to the areas in question. It is highly likely that these introductory knowledge areas are used as a foundation to learn the remaining task areas in the STS. The first seven knowledge areas listed below serve to familiarize a student to the United States Air Force lifestyle and are an essential element in providing structure to the medical career fields. However, the last two areas listed below provide a base to learn the individual knowledge areas in the remaining STS paragraphs. For example, area 9, Introduction to Medicine, introduces a student to medical jargon and ethics. Only one main heading area of the STS (8. Medical Logistics Procedures/Resource Protection) had very few tasks matched to it and should have possibly been supported by the tasks in the survey. In addition, some supplements under the major headings should be reviewed for appropriateness, based on the limited amount and types of tasks matched.

STS Paragraph Number and Title

1. Mission and Organizational Structure
2. Career Ladder Progression
3. Participate in USAF Graduate Evaluation Program
4. Security
5. AF Occupational Safety and Health (AFOSH) program
6. Supervision
7. Training
8. Medical Logistics Procedures/Resource Protection
9. Introduction to Medicine

Examination of the "tasks not referenced" to the STS revealed two aerospace medicine specific tasks that may warrant formal training based on TE and percent members performing data.

Determine type and frequency of physical exams and schedules as required  
Interpret Reading Aloud Tests

A complete listing of these tasks can be found in the Training Analysis Extract. All main heading areas of the CTS had tasks matched. However, some supplements under the major headings should be reviewed for appropriateness, based on the limited amount and types of tasks matched to them.

The "tasks not referenced" to the CTS revealed a number of tasks that may warrant formal training based on TE and percent members performing. A complete listing of these tasks can be found in the Training Analysis extract.

POI B3ABY90130. The Apprentice Aerospace Medicine Specialist Course (dated Mar 92) covers six areas of instruction. These include: Introduction to Medicine, Anatomy, Physiology and Pathophysiology, Emergency Medicine, Aerospace Medicine, USAF Hearing Conservation Program, and Physical Examinations. A large number of 901X0 personnel, especially in the Physical Examinations and Patient Care jobs, indicated that they use computers frequently in the performance of their jobs. Currently, there is no block of instruction on the use of computers (see Appendix E1). This POI was reviewed for appropriateness of instruction based on the jobs and tasks performed by survey respondents. The complete results of the matching of tasks to POI objectives are presented in a separate computer printout (PRTMOD) within the Training Extract.



POI B30BY9351. This course provides a wide variety of material on aerospace medicine, aerospace physiology, environmental health, and occupational medicine. The course was designed to familiarize several disciplines on related Air Force topics. As such, the POI has been adequately supported for the aerospace medicine utilization field.

Overall, the basic courses are well supported by survey data. Training is being performed on all major jobs being performed in the field. POI behavioral objectives are supported by the OSR data. Only three tasks were identified as possibilities for inclusion into the basic enlisted course. Two of these tasks are from the physical exam duty area, and the third is from the Medical Crash and Rescue duty area.

### **JOB SATISFACTION ANALYSIS**

An examination of satisfaction indicators of various personnel groups can provide officer utilization managers a better understanding of some of the factors that may affect the job performance of aerospace medicine personnel. Attitude questions covering job interest, perceived use of talents and training, sense of work accomplishment, current assignment information, time spent on additional duties, and career intentions/plans were included in the survey booklets. Appendix D provides job satisfaction data for the identified clusters and independent jobs; in addition, it displays difference in job satisfaction according to DAFSC.

Job Satisfaction for Jobs. Overall, officers and enlisted personnel involved with aerospace medicine were fairly satisfied. The lowest percentages for job interest were Physical Examinations Personnel and Patient Care Personnel (66 percent were satisfied) and Hospital Commanders (none were satisfied). All Hospital Commanders (N=24) felt their interest in the job was mediocre. Conversely, the highest percentages for job interest were Training Personnel (100 percent), SGP Physicians (93 percent), MAJCOM Staff (92 percent), and Superintendents (91 percent). Between 24 and 56 percent of personnel working in the 901X0 career field indicated that they maintain work hours of 50-59 hours per week. This may be an indication of overwork or lack of proper training. Patient Care Personnel perceive the use of their training to be low. Most of the personnel were satisfied with their work accomplishment except Patient Care Personnel (62 percent). As for career plans and intentions, most of the personnel involved with the Aerospace Physician cluster and the Managerial Personnel cluster plan to stay in the Air Force and retire. **Appendix D1** presents job satisfaction data for the identified clusters and independent jobs.

Job Satisfaction for DAFSC. As a whole, all personnel expressed interest in their job and are satisfied with their work accomplishment. DAFSC 935X and 901X0 personnel have a slightly lower job interest than the average enlisted person in all medical career fields. For enlisted personnel, job interest increases as rank increases. Both officers and NCOs also feel that their talents and training are being moderately utilized. As the DAFSC 90130/90150 NCOs upgrade to DAFSCs 90170, 90190/90100, their job satisfaction increases nearly 20 percent. Most members'

career intentions indicate a desire to stay and retire with benefits. DAFSC 9351 and 90130/90150 personnel have the lowest percentage of members indicating they would stay until retirement; however, this result is not surprising because these personnel have not committed to a career because of low TAFMS.

## **IMPLICATIONS**

Overall, analysis of the OSR data with the STS 901X0 and CTS B30BY9351 revealed that the data support these documents very well. However, there are some areas that might be improved upon. Likewise, POI B3ABY90130 and POI B30BY9351 are being well supported by the OSR data, but may need some minor adjustments.

Job satisfaction data revealed that Aerospace Medicine, as a whole, was slightly under the average for enlisted career fields of all medical specialties in the Air Force in 1993. As rank increases, so does retention and job satisfaction, except in the case of the Hospital Commanders, who did not feel their jobs utilized their talents and training.

When asked if the initial training course provided adequate training for administrative tasks, 52 percent of the Patient Care 901X0 group, 59 percent of the Physical Exams (901X0) group, and 66 percent of the Superintendent's group responded negatively. The officers responded in kind, with 65 percent of the first-assignment personnel and 71 percent of the career personnel having a negative response.

AFMAN 36-2105 and AFMAN 36-2108 provided accurate descriptions of the Aerospace Medicine career/utilization fields. All grade requirements were correct.



## **APPENDIX A**

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# APPENDIX A1

AEROSPACE MEDICINE JOBS BY DAFSC (Percent Members Performing)							
Jobs		9351	9356	90130	90150	90170	90190/ 90100
1.	PHYSICAL EXAMINATIONS PERSONNEL (N=437)	0	0	14	62	21	2
2.	PATIENT CARE PERSONNEL (N=128)	0	0	19	55	27	0
3.	AEROSPACE PHYSICIANS CLUSTER (N=181)	15	86	0	0	0	0
--	A. Operational Flight Surgeons (N=102)	12	89	0	0	0	0
--	B. Physical Examinations Physicians (N=6)	33	67	0	0	0	0
--	C. SGP Physicians (N=28)	2	98	0	0	0	0
4.	MANAGERIAL PERSONNEL CLUSTER (N=87)	2	34	0	29	21	18
--	A. MAJCOM Staff Personnel (N=12)	0	17	0	8	17	58
--	B. Superintendents (N=32)	0	0	0	9	78	13
--	C. Hospital Commanders (N=24)	0	100	0	0	0	0
5.	TRAINING STAFF (N=6)	0	0	0	17	83	0

## APPENDIX A2

AEROSPACE MEDICINE JOBS MAJCOM COMPARISON (Percent Members Performing)							
Jobs		AETC	ACC	AMC	AFMC	USAFE	PACAF
1.	PHYSICAL EXAMINATIONS PERSONNEL (N=437)	10%	34%	16%	8%	11%	14%
2.	PATIENT CARE PERSONNEL (N=128)	11%	38%	15%	6%	6%	12%
3.	AEROSPACE PHYSICIANS CLUSTER (N=181)	13%	36%	15%	10%	10%	6%
--	A. Operational Flight Surgeons (N=102)	10%	41%	18%	9%	9%	6%
--	B. Physical Examinations Physicians (N=6)	17%	0%	33%	0%	33%	0%
--	C. SGP Physicians (N=28)	29%	14%	11%	21%	7%	4%
4.	MANAGERIAL PERSONNEL CLUSTER (N=87)	10%	25%	7%	20%	7%	13%
--	A. MAJCOM Staff Personnel (N=12)	17%	8%	8%	8%	8%	8%
--	B. Superintendents (N=32)	3%	41%	6%	16%	6%	22%
--	C. Hospital Commanders (N=24)	13%	29%	4%	17%	8%	8%
5.	TRAINING STAFF (N=6)	0%	0%	0%	100%	0%	0%

# APPENDIX A3

TIME SPENT PERFORMING ADMINISTRATIVE TASKS (Percent Members Performing)					
Jobs	0-20%	21-40%	41-60%	61-80%	81-100%
PHYSICAL EXAMINATIONS PERSONNEL (N=437)	2%	5%	15%	34%	44%
PATIENT CARE PERSONNEL (N=128)	4%	9%	22%	34%	31%
AEROSPACE PHYSICIANS CLUSTER (N=181)	12%	48%	29%	9%	2%
A. Operational Flight Surgeons (N=102)	15%	51%	26%	8%	0
B. Physical Examinations Physicians (N=6)	0	83%	17%	0	0
C. SGP Physicians (N=28)	4%	39%	32%	14%	11%
MANAGERIAL PERSONNEL CLUSTER (N=87)	6%	16%	22%	26%	29%
A. MAJCOM Staff Personnel (N=12)	0	0	25%	8%	67%
B. Superintendents (N=32)	3%	13%	22%	38%	25%
C. Hospital Commanders (N=24)	0	38%	29%	13%	17%
TRAINING STAFF (N=6)	0	67%	17%	17%	0

# APPENDIX A4

TIME SPENT SEEING PATIENTS (Percent Members Performing)						
Jobs	0-10%	11-20%	21-30%	31-40%	41-50%	50+
PHYSICAL EXAMINATIONS PERSONNEL (N=437)	13%	21%	17%	15%	11%	22%
PATIENT CARE PERSONNEL (N=128)	11%	10%	18%	9%	19%	32%
AEROSPACE PHYSICIANS CLUSTER (N=181)	7%	7%	10%	18%	25%	34%
A. Operational Flight Surgeons (N=102)	2%	5%	8%	21%	25%	39%
B. Physical Examinations Physicians (N=6)	0	0	17%	17%	50%	17%
C. SGP Physicians (N=28)	36%	14%	11%	7%	21%	11%
MANAGERIAL PERSONNEL CLUSTER (N=87)	77%	8%	9%	5%	0	1%
A. MAJCOM Staff Personnel (N=12)	100%	0	0	0	0	0
B. Superintendents (N=32)	59%	16%	6%	0	3%	16%
C. Hospital Commanders (N=24)	79%	8%	13%	0	0	0
TRAINING STAFF (N=6)	100%	0	0	0	0	0

# APPENDIX A5

AEROSPACE MEDICINE JOBS ACCORDING TO OFFICER DUTY AFSC (Percent Members Performing)			
Jobs	9351 (N=35)	9356 (N=195)	935X (N=230)
PHYSICAL EXAMINATIONS PERSONNEL (N=437)	0	0	0
PATIENT CARE PERSONNEL (N=128)	0	0	0
AEROSPACE PHYSICIANS CLUSTER (N=181)	93%	79%	79%
A. Operational Flight Surgeons (N=102)	41%	46%	44%
B. Physical Examinations Physicians (N=6)	7%	2%	3%
C. SGP Physicians (N=28)	3%	14%	12%
MANAGERIAL PERSONNEL CLUSTER (N=87) *55 are enlisted*	7%	44%	14%
A. MAJCOM Staff Personnel (N=12) *only two are officers*	0	1%	1%
B. Superintendents (N=32)	0	0	0
C. Hospital Commanders (N=24)	3%	12%	10%
TRAINING STAFF (N=6)	0	0	0

# APPENDIX A6

AEROSPACE MEDICINE JOBS ACCORDING TO ENLISTED DUTY AFSC (Percent Members Performing)					
Jobs	90130 (N=85)	90150 (N=348)	90170 (N=169)	90190 (N=16)	90100 (N=5)
PHYSICAL EXAMINATIONS PERSONNEL (N=437)	72%	8%	54%	56%	0
PATIENT CARE PERSONNEL (N=128)	28%	20%	21%	0	0
AEROSPACE PHYSICIANS CLUSTER (N=181)	0	0	0	0	0
A. Operational Flight Surgeons (N=102)	0	0	0	0	0
B. Physical Examinations Physicians (N=6)	0	0	0	0	0
C. SGP Physicians (N=28)	0	0	0	0	0
MANAGERIAL PERSONNEL CLUSTER (N=87) *only 55 are enlisted*	0	2%	22%	44%	100%
A. MAJCOM Staff Personnel (N=12) *only 10 are enlisted*	0	**	1%	19%	80%
B. Superintendents (N=32)	0	1%	15%	25%	0
C. Hospital Commanders (N=24)	0	0	0	0	0
TRAINING STAFF (N=6)	0	**	3%	0	0

\* This is just a reminder that the computer program that sorts data by responses eliminates respondents as the groups become more specific (i.e., the Managerial Personnel cluster accounts for all of the 90100s in the survey, however, only 80 percent can be identified in the specific job, MAJCOM Staff)

\*\* Less than 1 percent of the 90150 respondents is represented by this group



## **APPENDIX B**

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# APPENDIX B1

## RELATIVE DUTY TIME SPENT BY DAFSC 901X0 SPECIALTY GROUPS (Percent Time Spent Performing Duties)

Duties	Patient Care (N=128)	Phys Exams (N=437)	Training (N=6)	Superintendents (N=32)	All 901X0 (N=669)
A. Performing Organizing and Planning Functions	6	5	6	26	7
B. Performing Directing and Implementing Functions	4	4	5	20	5
C. Performing Inspecting and Evaluating Functions	3	3	2	10	4
D. Performing Training Functions	3	3	79	22	4
E. Performing Administrative Functions	35	31	4	15	31
F. Performing Patient Care Procedures	31	14	1	3	16
G. Performing Physical Examinations	4	30	1	5	23
H. Performing Medical Crash and Air Rescue Coverage	10	8	0	6	8
I. Performing Squadron Medical Element (SME) and General Activity Functions	1	1	2	1	1
J. Performing Aeromedical Evacuation Functions	0	0	0	0	0
K. Performing Emergency Medicine Functions	0	1	0	0	1
L. Performing Physician Diagnosis and Medical Management Functions	0	0	0	0	0
M. Performing Physician Procedures	0	0	0	0	0

\* Highlighted boxes indicate areas of interest as they apply to each job

## APPENDIX B2

### RELATIVE DUTY TIME SPENT BY DAFSC 935X SPECIALTY GROUPS (Percent Time Spent Performing Duties)

Duties	Oper Flight Surgeon (N=102)	Phys Exams Physic (N=6)	SGP Physic (N=28)	Physic Cluster (N=181)	Hospital Command (N=24)
A. Performing Organizing and Planning Functions	8	8	18	10	28
B. Performing Directing and Implementing Functions	6	5	18	7	41
C. Performing Inspecting and Evaluating Functions	7	5	12	7	11
D. Performing Training Functions	3	1	4	3	2
E. Performing Administrative Functions	17	15	14	16	7
F. Performing Patient Care Procedures	12	19	7	11	1
G. Performing Physical Examinations	11	20	7	10	3
H. Performing Medical Crash and Air Rescue Coverage	8	2	4	7	1
I. Performing Squadron Medical Element (SME) and General Activity Functions	4	1	1	4	0
J. Performing Aeromedical Evacuation Functions	2	2	1	2	0
K. Performing Emergency Medicine Functions	13	3	7	11	2
L. Performing Physician Diagnosis and Medical Management Functions	7	14	4	7	2
M. Performing Physician Procedures	3	6	3	3	1

\* Highlighted boxes indicate areas of interest as they apply to each job

# APPENDIX B3

## RELATIVE DUTY TIME SPENT BY OFFICER GRADES (Percent Time Spent Performing Duties)

Duties	O-3 (N=92)	O-4 (N=55)	O-5 (N=39)	O-6 (N=44)
A. Performing Organizing and Planning Functions	9%	10%	13%	23%
B. Performing Directing and Implementing Functions	5%	8%	13%	30%
C. Performing Inspecting and Evaluating Functions	7%	7%	10%	10%
D. Performing Training Functions	3%	4%	4%	3%
E. Performing Administrative Functions	16%	16%	15%	9%
F. Performing Patient Care Procedures	13%	11%	8%	5%
G. Performing Physical Examinations	12%	11%	10%	7%
H. Performing Medical Crash and Air Rescue Coverage	7%	6%	6%	2%
I. Performing Squadron Medical Element (SME) and General Activity Functions	5%	3%	3%	1%
J. Performing Aeromedical Evacuation Functions	2%	2%	2%	1%
K. Performing Emergency Medicine Functions	11%	11%	9%	4%
L. Performing Physician Diagnosis and Medical Management Functions	7%	7%	6%	3%
M. Performing Physician Procedures	3%	3%	2%	2%

\* Percentages may not add to 100 percent due to rounding

# APPENDIX B4

## RELATIVE DUTY TIME SPENT BY ENLISTED GRADES (Percent Time Spent Performing Duties)

Duties	E-4 (N=244)	E-5 (N=146)	E-6 (N=69)	E-7 (N=35)	E-8 (N=12)	E-9 (N=7)
A. Performing Organizing and Training Functions	4%	9%	15%	21%	25%	23%
B. Performing Directing and Implementing Functions	2%	7%	14%	17%	23%	17%
C. Performing Inspecting and Evaluating Functions	2%	5%	8%	11%	13%	14%
D. Performing Training Functions	2%	6%	13%	9%	12%	6%
E. Performing Administrative Functions	34%	29%	22%	18%	14%	13%
F. Performing Patient Care Procedures	18%	14%	9%	5%	2%	1%
G. Performing Physical Examinations	26%	20%	12%	11%	7%	22%
H. Performing Medical Crash and Air Rescue Coverage	8%	9%	6%	7%	4%	2%
I. Performing Squadron Medical Element (SME) and General Activity Functions	1%	1%	1%	1%	0%	0%
J. Performing Aeromedical Evacuation Functions	0%	0%	0%	0%	0%	0%
K. Performing Emergency Medicine Functions	1%	1%	1%	1%	1%	0%
L. Performing Physician Diagnosis and Medical Management Functions	0%	0%	0%	0%	0%	0%
M. Performing Physician Procedures	0%	0%	0%	0%	0%	0%

\* Percentages may not add to 100 percent due to rounding

## **APPENDIX C**

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# APPENDIX C1

## DISTRIBUTION OF OFFICER GRADES ACROSS AEROSPACE MEDICINE JOBS (Percent Members Performing)

Jobs		O-3 (N=173)	O-4 (N=139)	O-5 (N=53)	O-6 (N=6)
1.	PHYSICAL EXAMINATIONS PERSONNEL (N=437)	0%	0%	0%	0%
2.	PATIENT CARE PERSONNEL (N=128)	0%	0%	0%	0%
3.	AEROSPACE PHYSICIANS CLUSTER (N=181)	47%	27%	17%	9%
--	Operational Flight Surgeons (N=102)	56%	26%	17%	1%
--	Physical Examinations Physicians (N=6)	17%	33%	33%	17%
-	SGP Physicians (N=28)	11%	21%	25%	43%
4.	MANAGERIAL PERSONNEL CLUSTER (N=87)	1%	2%	7%	26%
--	MAJCOM Staff Personnel (N=12)	0%	8%	8%	0%
--	Superintendents (N=32)	0%	0%	0%	0%
--	Hospital Commanders (N=24)	0%	0%	8%	92%
5.	TRAINING STAFF (N=6)	0%	0%	0%	0%

## APPENDIX C2

### DISTRIBUTION OF ENLISTED GRADES ACROSS AEROSPACE MEDICINE JOBS (Percent Members Performing)

Jobs	E-4 (N=244)	E-5 (N=146)	E-6 (N=69)	E-7 (N=35)	E-8 (N=12)	E-9 (N=7)
1. PHYSICAL EXAMINATIONS PERSONNEL (N=437)	41%	21%	8%	3%	1%	0%
2. PATIENT CARE PERSONNEL (N=128)	38%	26%	7%	1%	0%	0%
3. AEROSPACE PHYSICIANS CLUSTER (N=181)	0%	0%	0%	0%	0%	0%
-- Operational Flight Surgeons (N=102)	0%	0%	0%	0%	0%	0%
-- Physical Examinations Physicians (N=6)	0%	0%	0%	0%	0%	0%
-- SGP Physicians (N=28)	0%	0%	0%	0%	0%	0%
4. MANAGERIAL PERSONNEL CLUSTER (N=87)	1%	7%	21%	21%	7%	7%
-- MAJCOM Staff Personnel (N=12)	0%	8%	8%	17%	8%	42%
-- Superintendents (N=32)	0%	13%	38%	34%	16%	0%
-- Hospital Commanders (N=24)	0%	0%	0%	0%	0%	0%
5. TRAINING STAFF (N=6)	0%	33%	67%	0%	0%	0%

\* Percentages may not add to 100 percent due to rounding

### APPENDIX C3

#### DISTRIBUTION OF OFFICER GRADES ACROSS DAFSC 935X (Percent Members Performing)

Grade	9351 (N=29)	9356 (N=153)	935X (N=230)
O-3	66%	46%	40%
O-4	28%	19%	24%
O-5	0%	16%	17%
O-6	7%	19%	19%

### APPENDIX C4

#### DISTRIBUTION OF ENLISTED GRADES ACROSS DAFSC 901X0 (Percent Members Performing)

Grade	90130 (N=85)	90150 (N=348)	90170 (N=169)	90190/00 (N=21)	901X0 (N=669)
E-4	9%	63%	0%	0%	36%
E-5	1%	16%	47%	0%	22%
E-6	0%	2%	34%	5%	10%
E-7	0%	0%	18%	10%	5%
E-8	0%	0%	1%	52%	2%
E-9	0%	0%	0%	33%	1%

\* Percentages may not add to 100 percent due to rounding

\*\* Columns may not add to 100 percent due to the absence of E-1 through E-3 data

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## **APPENDIX D**

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# APPENDIX D1

## JOB SATISFACTION INDICATORS (Percent Members Responding)

### HOW DO YOU RATE YOUR JOB?

Jobs		INTERESTING	SO-SO	DULL
1.	PHYSICAL EXAMINATIONS PERSONNEL (N=437)	66%	21%	14%
2.	PATIENT CARE PERSONNEL (N=128)	66%	20%	14%
3.	AEROSPACE PHYSICIANS CLUSTER (N=181)	90%	6%	4%
--	A. Operational Flight Surgeons (N=102)	90%	7%	3%
--	B. Physical Examinations Physicians (N=6)	83%	17%	0%
--	C. SGP Physicians (N=28)	93%	4%	4%
4.	MANAGERIAL PERSONNEL CLUSTER (N=87)	94%	5%	1%
--	A. MAJCOM Staff Personnel (N=12)	92%	8%	0%
--	B. Superintendents (N=32)	91%	9%	0%
--	C. Hospital Commanders (N=24)	0%	100%	0%
5.	TRAINING STAFF (N=6)	100%	0%	0%

## APPENDIX D2

### HOW DOES YOUR JOB UTILIZE YOUR TRAINING (Percent Members Performing)

Jobs		PERFECT TO EXCELLENT	VERY TO FAIRLY WELL	VERY LITTLE TO NONE
1.	PHYSICAL EXAMINATIONS PERSONNEL (N=437)	12%	66%	22%
2.	PATIENT CARE PERSONNEL (N=128)	8%	65%	27%
3.	AEROSPACE PHYSICIANS CLUSTER (N=181)	23%	68%	9%
--	A. Operational Flight Surgeons (N=102)	21%	70%	10%
--	B. Physical Examinations Physicians (N=6)	50%	50%	0%
--	C. SGP Physicians (N=28)	29%	68%	4%
4.	MANAGERIAL PERSONNEL CLUSTER (N=87)	32%	59%	9%
--	A. MAJCOM Staff Personnel (N=12)	42%	50%	8%
--	B. Superintendents (N=32)	25%	69%	6%
--	C. Hospital Commanders (N=24)	33%	54%	13%
5.	TRAINING STAFF (N=6)	100%	0%	0%



# APPENDIX D3

## HOW SATISFIED ARE YOU WITH THE SENSE OF ACCOMPLISHMENT FROM WORK (Percent Members Performing)

Jobs		SATISFIED	NEUTRAL	DISSATISFIED
1.	PHYSICAL EXAMINATIONS PERSONNEL (N=437)	66%	12%	22%
2.	PATIENT CARE PERSONNEL (N=128)	62%	18%	20%
3.	AEROSPACE PHYSICIANS CLUSTER (N=181)	82%	3%	15%
--	A. Operational Flight Surgeons (N=102)	82%	1%	17%
--	B. Physical Examinations Physicians (N=6)	83%	0%	17%
--	C. SGP Physicians (N=28)	86%	4%	11%
4.	MANAGERIAL PERSONNEL CLUSTER (N=87)	86%	3%	10%
--	A. MAJCOM Staff Personnel (N=12)	92%	0%	8%
--	B. Superintendents (N=32)	78%	6%	16%
--	C. Hospital Commanders (N=24)	92%	4%	4%
5.	TRAINING STAFF (N=6)	100%	0%	0%

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## **APPENDIX E**

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# APPENDIX E1

DO YOU USE A MICROCOMPUTER IN THE PERFORMANCE OF YOUR JOB  
(Percent Members Performing)

Jobs	YES	NO
PHYSICAL EXAMINATIONS PERSONNEL (N=437)	72%	27%
PATIENT CARE PERSONNEL (N=128)	74%	26%
AEROSPACE PHYSICIANS CLUSTER (N=181)	55%	45%
A. Operational Flight Surgeons (N=102)	52%	48%
B. Physical Examinations Physicians (N=6)	83%	17%
C. SGP Physicians (N=28)	68%	32%
MANAGERIAL PERSONNEL CLUSTER (N=87)	90%	10%
A. MAJCOM Staff Personnel (N=12)	100%	0
B. Superintendents (N=32)	88%	13%
C. Hospital Commanders (N=24)	79%	21%
TRAINING STAFF (N=6)	83%	17%

## APPENDIX E2

### AVERAGE HOURS WORKED PER WEEK OVER LAST 6 MONTHS

Interval	Patient Care (N=128)	Physical Exams (N=437)	Training (N=6)	MAJCOM Staff (N=12)	Superintendent (N=32)
40-49 hours	68%	57%	50%	42%	28%
50-59 hours	24%	35%	33%	42%	56%
60-69 hours	6%	6%	17%	0%	13%
More	2%	2%	0%	17%	3%

## APPENDIX E3

DOES THE INITIAL TNG COURSE PROVIDE ADEQUATE TNG FOR ADMIN TASKS

	Patient Care (N=128)	Physical Exams (N=437)	Training (N=6)	MAJCOM Staff (N=12)	Superintendent (N=32)
YES	48%	41%	67%	58%	34%
NO	52%	59%	33%	42%	66%

## APPENDIX E4

DOES THE INITIAL TNG COURSE PROVIDE ADEQUATE TNG FOR ADMIN TASKS

	935X 1-48 mo TIUF	935X 49-96 mo TIUF	901X0 1-48 mo TIUF	901X0 49-96 mo TIUF
YES	35%	29%	45%	37%
NO	65%	71%	55%	63%

\* TIUF is defined as Time in Utilization Field



# APPENDIX E5

HOW ACCURATE DID AF REC SVCE DESCRIBE DUTIES PERFORMED BY 901X0s

	Patient Care (N=128)	Physical Exams (N=437)	Training (N=6)	MAJCOM Staff (N=12)	Superintendent (N=32)
PERFECTLY	1%	1%	0	0	3%
QUITE WELL	1%	4%	33%	0	0
FAIRLY WELL	11%	5%	0	8%	3%
VERY LITTLE	16%	21%	17%	17%	19%
NOT AT ALL	31%	32%	17%	17%	25%
Other	60%	63%	67%	42%	50%

## APPENDIX E6

HOW WOULD YOU RATE THE OJT YOU RECEIVED

	Patient Care (N=128)	Physical Exams (N=437)	Training (N=6)	MAJCOM Staff (N=12)	Superintendent (N=32)
DID NOT RECEIVE	3%	2%	0	0	0
EXCELLENT	16%	23%	17%	33%	31%
GOOD	44%	38%	67%	17%	31%
FAIR	25%	23%	0	33%	22%
POOR	9%	10%	17%	0	13%

# APPENDIX E7

HOW WOULD YOU RATE THE OPPORTUNITY FOR PROMOTION

	Patient Care (N=128)	Physical Exams (N=437)	Training (N=6)	MAJCOM Staff (N=12)	Superintendent (N=32)
EXCELLENT	2%	4%	17%	0	0
GOOD	20%	21%	50%	25%	28%
FAIR	46%	44%	17%	42%	38%
POOR	24%	20%	17%	17%	22%
VERY POOR	5%	11%	0	0	13%

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